



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/800,775

03/16/2004

Ki-Seon Yang

P57003

2638

7590  
Robert E. Bushnell  
Suite 300  
1522 K Street, N.W.  
Washington, DC 20005-1202

04/02/2008

EXAMINER

OVEISSI, DAVID M

ART UNIT

PAPER NUMBER

2616

MAIL DATE

DELIVERY MODE

04/02/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/800,775

**Applicant(s)**

YANG, KI-SEON

**Examiner**

DAVID OVEISSI

**Art Unit**

2616

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 December 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2, 7 and 8 is/are rejected.
- 7) ☒ Claim(s) 3-6 and 9-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date march 16, 2004.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application
- ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-2 and 7-8** are rejected under 35 U.S.C § 102 (b) as being anticipated by **Madruga et al. (US 6,917,985 B2)**.

**For claims 1 and 7** **Madruga** teaches a method/program storage device of configuring a direction-based Core Based Tree (CBT) for a CBT-based overlay multicast (see Fig. 1, column 2 lines 50-52 and column 20 line 51), the method comprising: requesting and receiving information on child nodes pre-subscribed to a core node at an arbitrary terminal node to be subscribed to the CBT (see abstract “a join request” and Fig. 3 Procedure Handle Join” Fig 4.”Join request”); calculating a direction between the terminal node and each of the child nodes and transmitting information on the child node having a minimum resultant value (see column 10 lines 30-42) to the core node along with a subscription request message; and comparing the calculated direction between a corresponding child node and the terminal node

Art Unit: 2616

with the calculated direction between child nodes pre-subscribed to the core node at the core node and subscribing the terminal node to either the child node or a parent node of the corresponding child node in accordance with the comparison to configure the CBT(see column 10 lines 30-42 "shortest path").

**For claims 2 and 8 Madruga** teaches the method, further comprising periodically transmitting and receiving a hello packet at the core node and the terminal node to and from the parent node, the child node and a brother node to confirm a state of the corresponding node and reconfiguring the configured CBT in response to the confirmed state of the corresponding node (see column 7 lines 26-41 "heartbeat").

#### **Allowable subject Matter**

2. **Claims 3-6 and 9-12** are objected to as being dependent upon a rejected base claim, but would be allowable if written in dependent form including all of the limitations of the base claim any intervening claims.

#### **Response to Argument**

3. Applicant's arguments filed December 10, 2007 have been fully considered but they are not persuasive. Applicant argued that

The present invention teaches a specifically recited method of optimizing the configuration of a CBT-based overlay multicast, and a program storage device tangibly embodying a program of instructions for performing a method including calculating

Art Unit: 2616

directions between various nodes and comparing the calculated directions to optimally select the various nodes.

In rejecting claims 1-2 and 7-8, the Examiner has cited specific portions of Madruga. Unfortunately, the cited portions of Madruga do not correspond to the rejected claims.

For example, the term "child" was only used once in Madruga in discussing a prior art method be compared with the method of Madruga. The terms "terminal node", "parent node", "brother node" and "child node" were not used at all in Madruga.

Since a cited reference must teach each and every recited feature of a claim rejected under 35 USC 102, and since Madruga does not teach or even discuss each and every recited feature of claims 1-2 and 7-8, it is submitted that these claims are patentable over Madruga.

Examiner respectfully disagrees: With respect to the first argument Madruga teaches this argued subject matter (see column 3 line 5 and column 20 lines 59-65).

With regard to second argument, the terms child and parent have been taught by Madruga (see column 17 line 59 and column 19 lines 49- 50 "every time a router loses its parent").

Art Unit: 2616

Further, with regard to second argument the terms brother node and terminal node and parent have been taught by Madruga (see column 10 line 50 –examiner considers neighbor nodes that have same parent as brother nodes.) Finally, examiner considers relay nodes as terminal the term terminal node (see column 6 lines 2, column 8 lines 23, 38, column 10 lines 41, and 56-58).

### ***Conclusion***

4. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure. **Francis et al. (5,331,637), Mccanne et al. (US 2004/0139150 A1), and Mccanne (US 7,080,157 B2).**

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

Art Unit: 2616

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

6. Any inquiry concerning this communication or earlier communications from examiner should be directed to David Oveissi whose telephone number is (571) 270-3127. Examiner can normally be reached on Monday to Friday 8:00 AM to 5:00 PM EST.

If attempts to reach examiner by telephone are unsuccessful, examiner's supervisor, Backer Firmin can be reached on (571) 272-6703. fax phone number for organization where this application or proceeding is assigned is 571-273-8300.

Information regarding status of an application may be obtained from Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to Private PAIR system, contact Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

D.O



MELVIN MARCELO  
PRIMARY EXAMINER